RECORD, CASE NOS. 14097 AND 14098.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1892.

TERM NO. 389.

WILLIAM TALBERT, APPELLANT,

vs.

THE UNITED STATES.

TERM NO. 390.

THE UNITED STATES, APPELLANT,

vs.

WILLIAM TALBERT.

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1 In the Court of Claims.

WILLIAM TALBERT
vs.
THE UNITED STATES. } No. 15220.

I.—*Petition—Filed August* 12, 1886.

To the honorable, the judges of the Court of Claims of the United States:

1. Your petitioner, William Talbert, respectfully represents that he is a citizen of the United States, at present residing in the city of Washington, District of Columbia, late of Montgomery County, Maryland.

2. Petitioner is a ship-carpenter by trade, and was employed off and on at the Washington navy-yard from 1833 up to 1882.

3. In 1860, when he was out of the employ of the Government, he conceived the plan for an improvement upon marine railways by which vessels of greater draught could be taken up for repairs than by any other mode then in use.

3. In the latter part of 1861, or beginning of 1862, he was appointed a quarter-man shipwright in the said Washington navy-yard, and continued to serve in that capacity until some time in 1864, when he was appointed master shipwright for said yard.

4. Prior to 1863 vessels drawing more than three feet of water and 230 feet long, and vessels drawing 6½ feet, if 150 feet long, could
2 not be repaired at the Washington navy-yard, because, by the marine railway then in use, nor by any other method then known, they could not be taken out of the water, and hence all large vessels save those which were too large to be taken up at all and had to be repaired at dry-docks) were sent to the Norfolk navy-yard for repairs, until the Confederates took possession of that yard in the spring of 1861. After that they were sent to private yards.

5. In 1862 a man by the name of Bishop was employed by the chief of the Bureau of Yards and Docks, to place a device of his upon the railway for the purpose of increasing its capacity, but this device utterly failed and broke down with the first attempt to use it, and Admiral Smith, who was then chief of said bureau, ordered its removal. Petitioner then showed to Commodore Harwood, then commandant of the yard, a drawing representing his invention. The commandant was pleased with it, and said he thought it would answer their purpose and requested petitioner to show it to Admiral Smith, which he did. Admiral Smith also approved of it, but having in view the recent failure of Bishop's device, asked petitioner in case of failure who would pay the cost of the experiment? Petitioner replied that he would. The Admiral then said they would try it, and if it proved a success petitioner should be paid outside prices for what it earned, to which the petitioner assented.

Petitioner files herewith copies of the official correspondence between Rear-Admiral Smith and Commodore Harwood relating to the adoption of his device, and he prays that the same may be taken as part of this petition, viz: letter dated December 23, 1862, from Admiral Smith to

Commodore Harwood, marked Exhibit A; letter from Commodore
3 Harwood to Admiral Smith, dated December 24, 1862, marked Exhibit B; letter from Admiral Smith to Commodore Harwood, dated December 26, 1862, marked Exhibit C; letter from Commodore Harwood to Admiral Smith, dated December 29, 1862, marked Exhibit D.

6. Petitioner, with the understanding that he was to be paid the value of his invention, in case it proved a success, by order of the commandant of the yard, put his improvement upon the cradle of the marine railway at said yard.

7. Petitioner's improvement consisted in laying a cast-iron track 100 feet long upon the top of the cradle, and placing thereon a series of carriages or trucks connected with chains. The railway is laid at a declination of $\frac{5}{8}$ of an inch to the foot, thereby increasing the water on the cradle 5 feet $2\frac{1}{2}$ inches in 100 feet. In use, the carriages are run down to the lower end of the track, which is submerged in the water 8 feet. The forefoot of the vessel is then landed on the front or upper carriage. The front carriage is then started up the incline carrying the vessel with it; as the front carriage advances the chains connecting it with the second are extended until the second carriage takes its place in contact with the vessel, and so on until the vessel is completely lifted upon the carriages, which are drawn to the head of the cradle. Hydraulic pressure is then applied, and the cradle bearing the vessel is then drawn out, and is ready for the workman. The ship of course remains upon the carriages and cradle until the repairs are completed, when the carriages and cradle are run down the railway into the water, and the ship is launched.

Petitioner's device will be more fully understood and compre-
4 hended by reference to copies of the specifications and descriptive drawing accompanying his application for letters patent herewith filed, marked Exhibits E and F.

Petitioner's patent has been mislayed, but he will either produce the original or a duly authenticated copy t hereof at the hearing.

8. The first vessel taken up by the use of petitioner's improvement was the "Ossipee," on the 3d of January, 1863. From that time to the filing of this petition the Government has continued to use the same device, and it has never been altered or repaired.

9. By the use of petitioner's improvement all vessels drawing eight feet and under, and of any length, may be easily and conveniently taken up and repaired or rebuilt at the Washington navy-yard. This classification comprises more than two-thirds of the vessels of the United States—vessels of larger draught can not be taken up at all, but are sent to dry docks for repairs.

10. From the 3d of January, 1863, during the remainder of the war, the improvement of the petitioner was in constant use, and many war vessels were repaired and some rebuilt, which could not have been taken out of the water at the Washington navy-yard, and would have had to be sent to private yards for repairs at greatly increased expense to the Government, but for petitioner's improvement, and many vessels have been repaired since the war and down to the present time, at the said yard, which would have had to be sent away but for petitioner's improvement.

11. In 1869 petitioner made application to the Secretary of the Navy for compensation for the use of his invention, which was declined by the Acting Secretary, the reason assigned being that the petitioner was
5 in the employ of the Government at the time when petitioner "suggested the use of his appliance." The original letter of the Acting Secretary is herewith filed, marked Exhibit G, which it is prayed may be taken as part of this petition.

12. Being denied compensation by the Secretary of the Navy, petitioner in 1869 made application to Congress, and has renewed it at every Congress from 1869 to 1886. Several times favorable reports have been made to the House, but he has never been able to get any final action until the 49th Congress passed for his relief the following act, which was approved June 30, 1886:

"An act for the relief of William Talbert.

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that the claim of William Talbert, of Montgomery County, Maryland, for the use by the Government of his patented improvement for marine railways, be, and the same is hereby, referred to the Court of Claims, with authority to take jurisdiction thereof, and to award judgment thereon as the merits of the case may demand, according to its value to the Government during the existence of such patent."

While his bill was pending in the House of Representatives, Mr. Shaw, from the Committee on Claims, made to the House a report, of which the following is a copy, to wit:

[House of Representatives. Report No. 664. 49th Congress, 1st session.]

WILLIAM TALBERT.

FEBRUARY 23, 1886.—Committed to the Committee of the Whole House and ordered to be printed.

"Mr. Shaw, from the Committee on Claims, submitted the fol-
6 lowing report (to accompany bill H. R. 3475):

The Committee on Claims, to whom was referred the claim of William Talbert, having had the same under consideration, beg leave to submit the following report:

"It appears from a letter of the chief of the Bureau of Yards and Docks, addressed to the Secretary of the Navy, and filed in this case, that some time in the year 1862 William Talbert, either by letter or verbally, asked permission to have tried an appliance to heave up vessels on the ways at the navy-yard at Washington, D. C. The trial of this appliance was authorized by the said Bureau, the expense of making the same to be charged to 'yard repairs.'

"The appliance was to enable the yard to haul up a vessel of greater length of a given draught than could otherwise be done at said yard without the use of said appliance, and by the less convenient means which had been in use before its adoption. At the time this appliance was placed upon trial, and which served its purpose, said Talbert was in the employ of the Government and the device was not patented. Subsequently, in

1864, Mr. Talbert obtained a patent for his invention, but has not received any compensation from the Government for its use. The bill proposes to refer Mr. Talbert's claim against the Government for the use of said appliance to the Court of Claims, said court to be authorized and directed to take jurisdiction thereof and to award judgment therein according to its value to the Government during the existence of said patent.

"That the Government of the United States, when it grants letters patent for a new invention or discovery in the arts, confers upon the patentee an exclusive property in the patented invention, which can not be appropriated by the Government itself, there is no doubt. The Supreme Court of the United States, in the case of James vs. Campbell (U. S. Rep., 104), says the Constitution gives to Congress power 'to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries,' which could not be effected if the Government had reserved right to
7 publish such writings or to use such inventions without the consent of the owner. The Government of the United States as well as the citizen is subject to the Constitution, and when it grants a patent, the patentee is entitled to it as a matter of right, and does not receive it as was originally supposed to be the case in England, as a 'mark of grace and favor.' The mode of obtaining compensation from the United States for the use of an invention has never been specifically provided for by statute. In the judgment of your committee the proper forum for claims of this character is the Court of Claims, and they therefore recommend that this bill do pass."

13. At the time petitioner's device was adopted by the order of Admiral Smith he had employed an attorney to make application for a patent for him, but the patent was not issued until the 2d day of February, 1864, and expired February 2d, 1881.

While the act of Congress authorizing this suit in terms authorizes the court to award judgment in his favor, "according to its value to the Government DURING THE EXISTENCE OF SAID PATENT," petitioner is satisfied that Congress intended that he should have the benefit of his invention from the commencement of its use by the Government to the expiration of his patent.

Between the 3d of January, 1862, when the Government began the use of petitioner's invention, and the 2d day of February, 1864, when the patent was issued, was a period of great activity at the navy-yard, and many vessels were taken up and repaired which could not have been repaired at that yard but for the use of petitioner's device, and the use thereof during this period was of great value to the Government. Petitioner prays the court to construe the act to conform to what petitioner thinks was the manifest intent of Congress; but if the court should be of opinion that the right of recovery is limited to the period between
8 the date of the patent and its expiration, in estimating the value for that period petitioner prays that the court will not lose sight of the benefit received by the Government both before the grant of the patent and since its expiration from the use of petitioner's invention.

14. During the greater part of the time from 1862 to 1882 petitioner was actively employed in the Government service at the Washington navy-yard, and never made any attempt to make any use of his patent whatever,

save the use by the Government, and he has therefore never received from any source whatever any pecuniary advantages from the use of his said invention, or from the sale of territory rights or otherwise.

15. Petitioner has no means of accurately estimating the value of his improvement to the Government.

During the war the most of the vessels used by the Government in blockading the Southern coast were repaired at the Washington navy-yard. The Government was enabled to do its own work under the immediate supervision of the Navy Department, and near to the theatre of its naval operations, with its own employees, machinery, tools, and materials. If the work had been done at private yards, during the life of petitioner's patent, which was done at the Washington navy-yard, and which could not have been done there but for the use of petitioner's device, the excess in cost to the Government would have amounted to many millions of dollars, but petitioner is willing to take, and he thinks he is justly entitled, to the sum of five hundred thousand ($500,000.00) dollars, for which he prays judgment.

WM. TALBERT.

S. S. HENKLE,
Sol'r for Claimant.

Address: 460 *Louisiana avenue, Washington, D. C.*

9 DISTRICT OF COLUMBIA, *ss:*

William Talbert, the petitioner in the foregoing petition, being duly sworn, on his oath states that he has made no assignment or transfer of the claim stated in the petition, nor any part thereof; that he is entitled to the amount claimed in said petition, after allowing all just credits and offsets, and that the facts stated in said petition are true, as he verily believes.

WILLIAM TALBERT.

Sworn to and subscribed before me this 12th day of August, 1886.
[SEAL.] SAM. C. MILLS,
U. S. Commissioner, ex officio Commissioner Court of Claims.

EXHIBIT A.

NAVY DEPARTMENT,
BUREAU OF YARDS AND DOCKS,
Washington, D. C., 23d December, 1862.

SIR: Be pleased to inform the Bureau when the railway carriages will be ready.

I am, respectfully, your obedient servant,

JOS. SMITH.

Commo.
A. A. HARWOOD,
Washington.

EXHIBIT B.

NAVY-YARD, WASHINGTON,
Commandant's Office, December 24th, 1862.

ADMIRAL: The railway carriages proposed by Mr. Talbert, and referred to in your letter of yesterday, can be got ready in three or four weeks from the time the Bureau issues the order for the alteration in the present mode of hauling vessels up.

By Mr. Talbert's plan more water can be got on the ways than by any other means yet adopted.

I have the honor to be, very respectfully, your obedient servant,

(Signed) AND. A. HARWOOD,
Commandant.

Rear Admiral JOS. SMITH,
Chief of Bureau of Yards and Docks.

EXHIBIT C.

NAVY DEPARTMENT,
BUREAU OF YARDS AND DOCKS,
Washington, D. C., 26th December, 1862.

SIR: Your letter of the 24th instant in relation to the railway carriages proposed by Mr. Talbert is received, and on consulting Mr. Sanger, he says: "I understand Mr. Bishop is preparing another set of rollers of larger size than those first used. If these are applied they will not accomplish the object proposed by Mr. Talbert. The application of Mr. Talbert's plan will not interfere with Mr. Bishop's arrangements." You will adopt Mr. Talbert's plan, to be paid for from repairs.

I am, respectfully, your obedient servant,

JOS. SMITH.

Commo.
A. A. HARWOOD,
Washington.

EXHIBIT D.

NAVY-YARD, WASHINGTON,
Commandant's Office, December 29th, 1862.

ADMIRAL: Referring to your letter of the 26th inst. in relation to the marine railway at this yard, it is proper to remark that there will be no additional advantage secured by permitting Mr. Bishop to apply large rollers.

Talbert's carriage will take up as heavy a vessel as the cradle can support, with much greater draft of water than Bishop's, and will in all probability answer every purpose required for hauling up vessels at this yard.

I have the honor to be, very respectfully, your obedient servant,

Commandant.

Rear admiral JOS. SMITH,
Chief of Bureau Yards and Docks.

12 UNITED STATES PATENT OFFICE.

William Talbert, of Washington, District of Columbia.—Improvement in marine railways.

Specification forming part of Letters Patent No. 41,452, dated February 2, 1864.

To all whom it may concern:

Be it known that I, William Talbert, of the city and county of Washington, and District of Columbia, have invented certain new and useful improvements in marine railways; and I do hereby declare that the same are described and represented in the following specification and drawings.

(Here follows diagram marked p. 11.)

To enable others skilled in the art to make and use my improvements, I will proceed to describe their construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

Figure 1 is a side elevation of a marine railway with my improvements, and showing the movable blocks or cars in their proper places to support a vessel on the cradle. Fig. 2 is a plan or top view showing the movable blocks or cars run together next to the stationary blocks, ready to take on a vessel. Fig. 3 is a cross-section on z z, Fig. 1. Fig. 4 is the under side of the movable block or car; Fig. 5, a portion of the track; Fig. 6, a wheel axle, and box.

The nature of my invention and improvements in marine railways consists in making a railway or track on the cradle for about one-half its length at the upper end, and providing one, two, three, or a series of movable blocks or cars to run on said railway track, which movable blocks or cars are so constructed and connected by chains fastened to each side that they may be placed together on the lower end of the railway track (when the cradle is run down or placed at the foot of the marine railway), where the fore foot of a vessel is placed on the upper movable block or car, which is drawn up, taking the vessel with it onto the cradle, and when the first block has moved a proper distance the chains start the second movable block, and when that has moved a proper distance the chains start the third block, and so on in succession, until all the movable blocks are properly placed and arranged under the keel of the vessel and she has been drawn onto the cradle.

In the accompanying drawings, which represent a marine railway with a cradle upon it provided with my improvements, A is the center piece, and B B the side rails, of the cradle, which are connected together by the bars C C, which have scores cut across them so as to lock onto the center piece and side rails; and there are also scores cut in the center piece and rails to receive the bars C C, and they are all bolted together, making a strong frame or cradle. The side pieces, C C, at the upper end of the cradle, are connected to the center piece, A, by the diagonal bars D D, which are firmly fastened to the center piece and side rails, and also to the upper bar C by knees and straps, which are strongly bolted to them, and also by metal plates placed top and bottom and bolted through, as shown in the drawings. On the under side of the center piece and side rails a series of

stands are fastened and provided with wheels E E, which roll on the marine railway track as the cradle is moved up and down the track. On the top of the upper portion of the center piece, A, for about one-half its length (more or less), I fasten a railway track, F, provided with a rack between the rails. The movable blocks or cars G G are provided with wheels to run on the track F, which cars are connected to each other and to the first stationary block H by the chains I I, and when the cars are run to the lower end of the track these chains fall each side of the center piece, A, and troughs may be arranged on the center piece to receive them. The first or upper car G is made twice as long as the others, to receive the fore foot of the vessel; and this car is provided with an eyebolt or staple, J, by which it is drawn on the rail track F. Between the stationary block H and the lower end of the cradle there are a series of stationary blocks, H H, as shown in the drawings, fastened to the center piece, A.

There are a series of scores in the center piece, A, and corresponding scores in the side rails, B B, for the ways K K of the bilge-blocks L L, which ways may be made in the form shown in the drawings, and the ends at the center piece are held down by the track F, and by the brackets M M below the track F, toward the lower end of the cradle.

The ways K K are fastened to the rails B B by knees fastened to the side rails to hold them in their proper places. There are some rails fastened on the ways K K with a rack in the middle for the pawls on the bilge-blocks, which run on the rails and are held down by brackets fastened to the bilge-blocks, so as to project under the rails on the ways. There are some standards, N N, at the ends of the ways K K, to which stand-
13 ards the lines which traverse the bilge-blocks and raise the pawls to them are fastened, and some pulleys may be fastened to the ways K K to guide the bilge-block lines. A pawl is attached to the rear or lower end of each of the cars G G, which falls into the rack between the track F to prevent the cars from running back when they are drawn up, and the upper car, which receives the fore foot of the vessel, may have six or more wheels under it. On the upper end of the upper car I erect a graduated standard, P, as shown in the drawings.

To use my improvements in taking a vessel up on a railway, I run all the movable blocks or cars against each other at the lower end of the track F, and then run the cradle down the railway until the standard P on the upper car indicates sufficient water on the upper car to receive the fore foot of the vessel, and then haul the fore foot of the vessel onto the upper car, and apply power to the car and haul it up on the track F, drawing the vessel with it, and as the chain, which connect the cars are drawn tight or straight the cars move forward in succession and are arranged at proper distances in succession on the track. When the vessel has been hauled her whole length on the cradle, the power is applied to the cradle, and it is drawn up on the railway; and when it is apparent that the keel of the vessel at the stern rests on the cradle, so as to lift her up in the water, the bilge-blocks should be hauled under to hold the vessel upright on the cradle. When the cars are drawn up on the track F, the pawls on the rear ends of the cars catch in the rack between the track F and hold the cars from running back. When the vessel is ready to be launched, the pawls on the cars must be all triced or tied up, so as to leave the cars free to run to the lower end of the track F as the vessel runs off of the cradle.

I believe I have described and represented the improvements in marine railways which I have invented so as to enable any person skilled in the art to make and use them without further invention or experiment.

I will now state what I desire to secure by Letters Patent, to wit:

1. In combination with the cradle of a marine railway, a rail track on the cradle, with one, two, three, or movable blocks or cars, for the purpose of taking the fore foot of a vessel, with the vessel itself, onto the cradle, substantially as described.

2. In combination with the above-mentioned movable blocks or cars, the chains which connect the cars and place them at proper distances apart under the vessel as she is drawn onto the cradle, substantially as described.

WM. TALBERT.

Witnesses:
J. DENNIS, JR.,
JNO. H. JOHNA.

EXHIBIT G.

NAVY DEPARTMENT,
Washington, August 12th, 1869.

SIR: The department received, and has had under consideration, your petition of the 27th ultimo, praying compensation by the Government for the use of your invention to facilitate the hauling of ship supon the ways.

It appears that you were in the employ of the Government when you suggested the use of your appliance, and it was used while you were so employed. Employés of the Government are prohibited from receiving compensation, unless by special act of Congress, for any inventions that the Government may use.

This Department would not be authorized to grant you compensation.

Very respectfully,

M. SMITH,
Acting Secretary of the Navy.

WM. TALBERT, Esq.,
Care of S. S. Henkle, 441 5th street, Washington, D. C.

14 II.—*Traverse filed September* 15, 1886.

And now comes the Attorney-General on behalf of the United States, and answering the petition of the claimant herein, denies each and every allegation therein contained, and asks judgment that the petition be dismissed.

And as to so much of the said petition as avers that the said claimant has at all times borne true faith and allegiance to the Government of the United States, and has not in any way voluntarily aided, abetted, or given encouragement to rebellion against the said Government, the Attorney-General, in pursuance of the statute in such case provided, denies the said allegations, and asks judgment accordingly.

ROBERT A. HOWARD,
Asst. Atty. General.

III.—*Defendant's special plea, filed Oct.* 26, 1889.

The defendant pleads to claimant's petition herein, and, by way of special answer thereto, says:

(1) That claimant's said supposed invention was not novel at the date of the issue of letters patent thereon, nor at the time of filing of claimant's application for said letters patent, but that the same had been patented prior thereto, and that the mechanical principle embraced therein had before been discovered, and for more than two years prior thereto publicly used as shown by the following recorded patents, to wit:

(a) In patent 2,911, granted to Patrick Flannigan for marine railway, January 16, 1843, by the United States Patent Office. (In Record No. 144.)

(b) In English patent No. 6,045 of date , 1830, granted to one , for improvements in marine railway and cradles.

(c) In English patent No. 75, dated January 8, 1857, for improvement in marine railway cradles for heaving up ships, granted to one Robert Turnbull. (Record, 138–9.) Copies of the plans and
16 specifications in each of said patents are now on file in this cause, and are hereby referred to and made part hereof. The defendant proposes thereby to dispute the novelty of claimant's said alleged invention, and to deny thereby claimant's right of discovery of the mechanical principle involved in his said invention.

The residences of said patentees are to the defendant unknown.

Wherefore, the defendant demands judgment.

JOHN B. COTTON,
Asst. Atty. General.
JOHN C. CHANEY,
Asst. Attorney.

IV.—*Demurrer of claimant to special pleas filed Oct.* 30, 1889.

The special pleas are bad in substance.

S. S. HENKLE,
Atty. for Claimant.

17 V.—*Argument and submission of case.*

At a Court of Claims held in the city of Washington on the 30th and 31st days of October and the 5th and 6th days of November, A. D. 1889, this case was argued by Mr. Henkle for the claimant and Mr. Chaney for the defendants, and submitted.

18 VI.—*Findings of fact and conclusion of law—Filed February* 3, 1890.

This case having been heard by the Court of Claims, the court, upon the evidence, find the facts to be as follows:

I.

Plaintiff is a resident of the District of Columbia; by occupation a ship-carpenter. As a ship carpenter he was, from time to time, between

the years 1833 and 1852, employed at the Washington navy-yard, situated upon the Eastern Branch of the Potomac River. In 1860, when not in Government employment, he contemplated establishing at Washington, upon said Eastern Branch, a small shipyard of his own, for the purpose of hauling out and repairing vessels. In measuring for the track of a marine railway he found that, owing to shallow water, he could not get a sufficient length of track to take out vessels of considerable size without obstructing the said Eastern Branch. Seeking to avoid this difficulty, he invented an improvement upon marine railways, of which he made drawings, and which is hereinafter described. Afterwards and at the beginning of the late war, finding that there was sufficient work to give him employment again in the Washington navy-yard, he decided to postpone his private enterprise and to resume work in the navy-yard. While so employed he found the difficulty existed at the navy-yard which he had expected to encounter at his projected shipyard, to wit, a want of sufficient depth of water at the foot of the marine railway for taking up vessels of deep draught and considerable length.

The same difficulty was recognized by the Government officers as existing at the navy-yard, and for that reason they, in 1862, employed one Bishop to construct upon the cradle of the railway a device intended to remedy the difficulty. The Bishop device failed; it was crushed at the first trial by the vessel placed upon it.

Talbert's device was then (and during the winter of 1862–1863) put upon the cradle, after he had instructed an attorney to apply for a patent, but before he received the patent. The officers of the Navy knew of his intention to procure a patent before they used the device. The device was put upon the railway by Talbert, under direction of Rear-Admiral Smith, then Chief of the Bureau of Yards and Docks, with the understanding and agreement between him and Talbert that the latter should be allowed as compensation (if the invention should prove to answer the purpose for which it was intended) "outside prices" for the work done by it. If the device failed Talbert was to pay for the trial. Talbert asked that his device be not used until his patent issued, but Admiral
19 Smith stated that imminent national necessity required immediate use of the device, and told him to place it immediately upon the cradle. Application for patent was filed in Patent Office in March, 1863.

II.

February 27, 1869, plaintiff asked compensation for the use of his invention. This request was refused by the Secretary of the Navy upon the following ground:

"It appears that you were in the employ of the Government when you suggested the use of your appliance, and it was used while you were so employed. Employés of the Government are prohibited from receiving compensation, unless by special act of Congress, for any inventions that the Government may use.

"This Department would not be authorized to grant you compensation."

A subsequent application to the Navy Department for remuneration was refused upon substantially the same ground. Plaintiff then applied to Congress for relief.

Talbert's improvement was put upon the cradle at the Washington navy-yard late in the winter of 1862; it has been in use there ever since. All vessels which have been taken out of the water for repairs at the Washington navy-yard since the early part of 1863 have been taken out by the use of Talbert's device.

III.

February 2, 1864, Talbert obtained a patent, numbered 41452, from the United States for the "Improvement in marine railways," of which he was the original inventor.

The following are the drawings, specifications, and claims filed in the Patent Office, describing said invention:

[United States Patent Office. William Talbert, of Washington, District of Columbia. Specifications forming part of Letters Patent No. 41452, dated February 2, 1864.]

IMPROVEMENT IN MARINE RAILWAYS.

To all whom it may concern:

Be it known that I, William Talbert, of the city and county of Washington, and District of Columbia, have invented certain new and useful improvements in marine railways; and I do hereby declare that the same are described and represented in the following specifications and drawings.

To enable others skilled in the art to make and use my improvements, I will proceed to describe their construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

Figure 1 is a side elevation of a marine railway with my improvements, and showing the movable blocks or cars in their proper places to support a vessel on the cradle. Fig. 2 is a plan or top view showing the movable blocks or cars run together next to the stationary blocks, ready to take on a vessel. Fig. 3 is a cross-section on z z, Fig. 1. Fig. 4 is the under side of the movable block or car; Fig. 5, portion of the track; Fig. 6, a wheel axle, and box.

The nature of my invention and improvement in marine railways consists in making a railway or track on the cradle for about one-half its length at the upper end and providing one, two, three, or a series of movable blocks or cars to run on said railway track, which movable blocks or cars are so constructed and connected by chains fastened to each side that they may be placed together on the lower end of the railway track (when the cradle is run down or placed at the foot of the marine railway) where the fore foot of a vessel is placed on the upper movable block or car, which is drawn up, taking the vessel with it onto the cradle, and when the first block has moved a proper distance the chains start the second movable block, and when that has moved a proper distance the chains start the third block, and so on in succession, until all the moveable blocks are properly placed and arranged under the keel of the vessel and she has been drawn onto the cradle.

(Here follows diagram marked p. 20.)

21 In the accompanying drawings, which represent a marine railway with a cradle upon it provided with my improvements, A is the center piece, and B B the side rails, of the cradle, which are connected together by the bars C C, which have scores cut across them so as to lock onto the center piece and side rails; and there are also scores cut in the center piece and rails to receive the bars C C, and they are all bolted together, making a strong frame or cradle. The side pieces C C, at the upper end of the cradle, are connected to the center piece A by the diagonal bars D D, which are firmly fastened to the center piece and side rails, and also to the upper bar C by knees and straps which are strongly bolted to them, and also by metal plates placed top and bottom and bolted through, as shown in the drawings. On the under side of the center piece and side rails a series of stands are fastened and provided with wheels E E, which roll on the marine railway track, as the cradle is moved up and down the track. On the top of the upper portion of center piece A, for about one-half its length (more or less), I fasten a railway track F, provided with a rack between the rails. The movable blocks or cars G G are provided with wheels to run on the track F, which cars are connected to each other and to the first stationary block H by the chains I I, and when the cars are run to the lower end of the track these chains fall each side of the center piece A, and troughs may be arranged on the center piece to receive them. The first or upper car G is made twice as long as the others, to receive the fore foot of the vessel; and this car is provided with an eyebolt or staple J, by which it is drawn on the rail track F. Between the stationary block H and the lower end of the cradle there are a series of stationary blocks H H, as shown in the drawings, fastened to the center piece A.

There are a series of scores in the center piece A, and corresponding scores in the side rails B B, for the ways K K of the bilge-blocks L L, which ways may be made in the form shown in the drawings, and the ends at the center piece are held down by the track F, and by the brackets M M below the track F, towards the lower end of the cradle.

The ways K K are fastened to the rails B B by knees fastened to the side rails to hold them in their proper places. There are some rails fastened on the ways K K with a rack in the middle of the pawls on the bilge-blocks, which run on the rails and are held down by brackets fastened to the bilge-blocks, so as to project under the rails on the ways. There are some standards N N at the ends of the ways K K, to which standards the lines which traverse the bilge-blocks and raise the pawls to them are fastened, and some pulleys may be fastened to the ways K K to guide the bilge-block lines. A pawl is attached to the rear or lower end of each of the cars G G, which falls into the rack between the track F to prevent the cars from running back when they are drawn up, and the upper car, which receives the fore foot of the vessel, may have six or more wheels under it. On the upper end of the upper car I erect a graduated standard P, as shown in the drawings.

To use my improvements in taking a vessel up on a railway, I run all the movable blocks or cars against each other at the lower end of the track F, and then run the cradle down the railway until the standard P on the upper car indicates sufficient water on the upper car to receive the fore foot of the vessel, and then haul the fore foot of the vessel onto the upper

car, and apply power to the car and haul it up on the track F, drawing the vessel with it, and as the chains which connect the cars are drawn tight or straight the cars move forward in succession and are arranged at proper distances in succession on the track. When the vessel has been hauled her whole length on the cradle, the power is applied to the cradle, and it is drawn up on the railway; and when it is apparent that the keel of the vessel at the stern rests on the cradle, so as to lift her up in the water, the bilge-blocks should be hauled under to hold the vessel upright on the cradle. When the cars are drawn up on the track F, the pawls on the rear ends of the cars catch in the rack between the track F and hold the cars from running back. When the vessel is ready to be launched, the pawls on the cars must be all triced or tied up, so as to leave the cars free to run to the lower end of the track F as the vessel runs off of the cradle.

I believe I have described and represented the improvements in marine railways which I have invented so as to enable any person skilled in the art to make and use them without further invention or experiment.

I will now state what I desire to secure by letters patent—to wit:

In combination with the cradle of a marine railway, a rail track on the cradle, with one, two, three, or movable blocks or cars, for the purpose of taking the fore foot of a vessel, with the vessel itself, onto the cradle, substantially as described.

2. In combination with the above-mentioned movable blocks or cars, the chains which connect the cars and place them at proper distances apart under the vessel as she is drawn onto the cradle, substantially as described.

WM. TALBERT.

Witnesses:
J. DENNIS, Jr.,
JNO. H. JOHNA.

22 IV.

Plaintiff's invention was applied as follows: The railway at the navy-yard was the ordinary marine railway, consisting of three heavy parallel timbers leading from the water up the bank, the middle one being 28 inches wide and the outside ones being each 14 inches wide; upon these timbers were iron rails. The track was about 450 feet long; it ran upon a grade of five-eighths of an inch to the foot, sloping downwards towards and into the Eastern Branch of the Potomac River. From high-water mark it extended about 200 feet into and under the water.

The cradle was placed upon the track and corresponded with it. It was made of three heavy pieces of timber laid lengthwise upon the rails of the track and securely fastened into a frame-work. The whole framework moved upon heavy iron wheels upon the three rails of the track. The wheels on the center rail were 6 feet apart, and upon the side rails there was a wheel under each bilge block. The bilge blocks were intended to be moved in by sliding against the hull so as to hold the vessel in place and upright after she grounded upon the center timber of the cradle.

Before Talbert's device was applied there were fixed upon the center timber of the cradle heavy stationary blocks 5 feet apart the whole length of

the cradle. These blocks were 2 feet high, the keel of the vessel grounded upon them, and their office was to bear the weight of the ship and to give room between the ship's keel and the cradle to allow work to be done on the under side of the vessel.

In preparing the cradle to receive his improvement Talbert removed the stationary blocks from the center timber of the cradle for a distance of 100 feet from the head, or upper end, of the cradle and placed a cast-iron track upon the center timber of the cradle, with a rack in the center to hold a pawl attached to the after end of the forward car.

The stationary blocks on the after end of the cradle (the end nearest the water, were left as they were originally on the cradle. The tops of the cars were on the same plane as the tops of the remaining blocks. The cars were fastened one to another by chains of convenient length.

V.

At the Washington navy-yard there was but 3 feet of water upon the upper end of the cradle when immersed, and, prior to the adoption of Talbert's device, vessels drawing more than 3 feet of water and 200 feet long could not be taken out. Vessels drawing 5 feet of water and 150 feet long might have been taken upon the after end of the cradle, but not sufficiently high up on the cradle for efficient work upon them. By the use of Talbert's improvement vessels drawing 13 feet of water and 250 feet long were taken up so as to be efficiently repaired.

VI.

The Washington navy-yard was thoroughly furnished with the best shipwrights' tools and latest and best machinery, and was equipped as a private proprietor would not equip his ship-yard for ordinary business. But for Talbert's improvement, or its equivalent, the use of the yard would necessarily have been limited to the repair of the small vessels which could have been taken up on the cradle without that improvement.

23 During the war gunboats were repaired at the Washington yard which it would have been difficult to repair at private yards in time to meet the exigencies of the service, and which could not have been repaired at the Washington yard without using Talbert's or a similar device. The ability to repair their vessels at the Washington navy-yard, especially during the active operations of the war, was of service and value to the Government.

VII.

The Talbert invention was novel and useful, and was the product of original thought and inventive skill.

Talbert never made or attempted to make any other use or profit out of his invention, and it does not appear that the invention ever has been used elsewhere than at the Washington navy-yard.

The expense of putting the device on the cradle was borne by the Government.

Talbert remained in the Government service as a ship-carpenter until 1882, and received the pay of a ship-carpenter.

VIII.

The value to the Government of plaintiff's patented improvement for marine railways during the existence of his patent was $6,564.30, being 2 per cent upon the amount earned by the railway cradle as improved during said period.

IX.

One Robert Turnbull, of Harwich, Essex County, England, obtained in England letters patent sealed March 10, 1857, and dated 18th January, 1857, for an invention of cradles for heaving up ships. The following are the drawings, specifications, and claims upon which said letters patent were granted:

Specification in pursuance of the conditions of the letters patent, filed by the said Robert Turnbull in the great seal patent office on the 8th July, 1857.

To all to whom these present shall come:

I, Robert Turnbull, of Harwich, in the county of Essex, foreman shipwright, send greeting. Whereas her most Excellent Majesty Queen Victoria, by her letters patent, bearing date the eighth day of January, in the year of our Lord one thousand eight hundred and fifty-seven, in the twentieth year of her reign, did, for herself, her heirs and successors, give and grant unto me, the said Robert Turnbull, her especial license that I, the said Robert Turnbull, my executors, administrators, and assigns, or such others as I, the said Robert Turnbull, my executors, administrators, and assigns, should at any time agree with, and no others, from time to time, and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an invention for "Improvements in cradles for heaving up ships," upon the condition (amongst others) that I, the said Robert Turnbull, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the said invention, and in what manner the same was to be performed, and cause the same to be filed in the great seal patent office within six calendar months after the date of the said letters patent.

Now know ye, that I, the said Robert Turnbull, do hereby declare the nature of my said invention, and in what manner the same is to be
24 performed, to be particularly described and ascertained in and by the following statement, reference being had to the sheet of drawings hereunto annexed and to the letters and figures marked thereon, that is to say:

My invention of improvements in ships' cradles refers to cradles placed on inclined ways or rails for heaving or drawing up ships out of the water, and has for its object to enable the heaving up of a ship drawing more water than can be effected by the ordinary cradle on the same ways. I construct a cradle for this purpose in parts, so that the one part may sep-

arate a certain distance from the other, while at the same time the parts of the cradle are suitably tied and held together to limit the separation and to keep them in their proper relative position while either elongated or contracted; when contracted, the cradle is considerably less in length than the ship which may be lifted on it.

In placing a ship on the cradle, the parts of the cradle are brought close together and lowered down the ways and the ship brought over it, so as to ground or take the front part of the cradle with her forefoot a little in front of the fore part of the cradle, her stern at the time projecting a considerable distance beyond the after end of the cradle. The cradle, being now hove up on the fore part, advances up the ways and lifts the fore part of the ship, the after part at the time being afloat and not on the after part of the cradle. During this time the other parts of the cradle remain stationary, and until the fore part has advanced, say about fifteen or sixteen feet (the limit of its sliding connecting bars). Having arrived at this limit, the second part of the cradle follows the first up the ways and separates from the after part until it has moved the distance, say, of ten or twelve feet, as limited by the connecting bars; the whole cradle now (if in three parts) moves together. By this time the stern of the ship will be brought immediately over the after part of the cradle, on which she settles or grounds, and is supported as in ordinary.

By forming the cradle in three or more principal parts support is given to the vessel at suitable points without much intermediate space between the parts when separated, while at the same time affording considerable extent of elongation.

If the cradle is divided in two parts it will in some respects answer the purpose, but I think with less advantage than if further subdivided. If there is plenty of water for the ship to come over the cradle it may be adjusted and fixed at once to the length of vessel to be raised. The parts of the cradle should be adjusted so that the extent of their separation should be suited to the length of the vessel to be hove up.

Description of drawings.

(Here follows diagram, marked p. 26.)

Figure 1 represents a side view of a cradle for heaving up ships, constructed according to my invention, with a ship in position about to be hove up; figure 2, a similar view of the cradle, with the ship partially hove up; and figure 3, a like view, with the ship in position about to ground on the whole length of the cradle, while figure 4 represents an end view of the same.

This cradle is formed in five principals parts, A, B, C, D, and E.

In figure 1 the cradle is represented in its shortest form, with these several parts close together; in figure 2, the fore parts A and B have separated from the after parts C, D, and E, while in figure 3 the whole of the parts are separated to the utmost limit and with the cradle extended to its extreme length.

Figure 5 represents a plan of the cradle with the parts in position, as at figure 3; and figure 6 represents a part of the detail on an enlarged scale. The general construction of the parts A, B, C, D, and E is the

same as that of cradles in ordinary, consisting of three principal longitudinal timbers, which in ordinary cradles are in one piece from end to end, and unite the whole cradle together, but which, according to my invention, I make in short lengths, *a b c*, as best seen in the plan, figure 5.

These timbers are furnished with wheels or rollers, *d d d*, which are mounted on and traverse the rails or ways F F as usual; the longitudinal timbers *a*, *b*, and *c* are connected by the transverse timbers *e e*, on which the sliding chocks *f f* rest; the timbers *e e* are fitted and secured to the pieces *a b c* in the ordinary manner, so that they may be readily taken to pieces when required; and I further strengthen each part of the cradle separately by iron cross-ties, *g g*, which may be fitted into metal sockets, so as to be readily removable. The fore part A is also furnished with two stays, *h h*; the cross timber *i* of the after part E, I form a fixture with the side pieces *a' b' c'*, which keeps the whole of the longitudinal part together when traversing the cradle from under ship.

The parts A, B, C, D, and E, are connected together by longitudinal tie rods *k k k*, of iron, one of which is represented on an enlarged scale at figure 6, as connected with parts of the middle longitudinal timbers *b b*; these rods are fitted with iron socket pieces, *l l'*; the one end being fixed by cotters *n n* in *l*, while the other end is free to slide in *l'*, but is furnished with a head, *m*, by which it is prevented being drawn out or beyond the position shown in figure 6; the socket pieces, which are fitted to the middle timber *b* are recessed into that timber, so that the rod *k* is entirely below the blocks *p p*, on which the keel of the ship rests; the sockets, being so recessed into the timbers, are secured by through bolts *q* passing through the feather or thin part of the socket. The timber *b* is so recessed throughout its length so that the rod *k* may be slid its whole length therein.

The socket pieces *l l'* and rods *k k*, of the side timbers *a c*, are similarly fitted and fixed, but so that the rods *k* project from the sides; the rods *k* so fitted permit the parts of the cradle A, B, C, D, and E to approach close to each other, as at figure 1, or to separate to a distance from each other, as at figure 3; *r* is a chain attached to the afterpart E, and carried underneath the parts B C D, and connected with a short piece, *s*, and secured and held thereto by a stopper to retain the whole of the parts close together; *t t* are the palls as used in ordinary cradles, which take into racks on the ways to hold the cradle after partially or entirely heaving the ship up.

The several palls of each part are connected with a rope or cord carried up to high-water mark. When the cradle is lowered down, these palls are secured in a raised position, and so held by the cords, and are let go in succession as the several pieces A, B, C, D, and E, ascend the ways, and as it may be desired to hold the ship when fleeting the heaving purchase.

When the cradle is let down the ways for the purpose of heaving up a ship, the several parts A, B, C, D, and E are brought close together, as at figure 1, and secured by the chain *r s*, and then lowered; the ship is then floated over it, and her forefoot entered between the guide pieces *n u*, and grounded on the fore part A with the water line, as shown at *l l*; the chain *v* is then hove upon previously to heaving upon the chain *v*; the chain *r s*, which holds the parts of cradle together, is now let go by the stopper before mentioned, a rope being carried up to high-water mark for

that purpose. By heaving on the chain *v*, or other purchase by which the ship is hove up, the fore part A will pass up the ways with the fore part of the ship grounded upon it, leaving the remaining parts B, C, D, and E as at first lowered; this proceeds until the parts A and B separate to the extent limited by the sliding bars *k* between those parts; the further heaving up now separates the parts B and C, the part B proceeding up the ways, leaving the remaining parts C, D, and E behind, until the full extent of separation limited by the sliding bars *k* between the parts B and C and as represented in figure 2, in which it will be seen that the ship is partially raised, and drawing less water forward than aft, as marked by the water line 1 2. In this manner the heaving up is conducted until the several parts of the cradle are entirely separated from each other, and it is extended to its full length, and to the length of the ship, as seen in figure 3, in which position the vessel is about to ground on the full length of the cradle; *w* is a guide for setting her fair on the blocks at the after end.

The water line 1 3 shows the level and probable depth of her immersion at this time. After the separation of the several parts A, B, C, D, and E, and after the ship takes the blocks aft, I bring forward the sliding chocks *f f* by the chains attached thereto, as well understood in lifting ships with ordinary cradles.

After the ship fairly settles on the cradle she is hove out of water on the cradle as so extended. When raised to the point required, I now shore her up at the several points between the parts A, B, C, D, and E of the cradle, and when so properly shored and lifted from the cradle I remove all the cross timbers of that structure, except the afterpiece *i*; I also remove the cross stays *g g*, when the longitudinal timbers still connected by the sliding rods *k k* may be traversed down the ways from under the ship, and may be again put together to heave another ship upon the same ways if the first is carried sufficiently high above high-water mark, or the first ship may be hove in a direction transverse to the inclined ways on "hollows and rounds," or on other suitable parts, whereby she may be so moved out of the way of the succeeding operation.

In cases where the incline of the ways is not very steep, or from other causes the weight of the parts of the cradle is insufficient to carry it down, I place an iron sheave or pulley at the lower end of the ways and pass a chain over it, the one end of which I attach to the lower end of the cradle, and carry the other end up above high-water mark, whereby the cradle may be assisted in the descent. Before lowering the cradle the several parts A, B, C, D, and E are placed close together and secured by the chain *r s* and chain stopper, as before explained. Thus it will be seen that supposing the limit of the ways to be at X, say at low-water mark, the fore part of the cradle will be much nearer that point by reason of the contraction of the cradle than if it were of the full length of the ship to be lifted, and that therefore a ship may be lifted by this means, which, by reason of her draught of water, her stern, of necessity, projects beyond the lower end of the ways a considerable distance, as seen in the drawing, figure 1, and whereby I am enabled to lift a ship, which otherwise would not be within the limits of the ways and cradle.

In addition to this advantage with cradles, according to my invention I am enabled to shore up a ship more readily and more easily to
27 remove the cradle from under her after she is hove up, than is the case with ordinary cradles. The launching of ships on my im-

proved cradle is conducted in a manner inversely to that described with reference to that of heaving up, and will not require any further description.

I would remark that, although I have represented the cradle in the drawing as divided into five parts, it may be otherwise divided, that is to say, separated into two, three, or more parts for the purposes described; and also that the length of the cradle may be varied by adding to or removing one or more of the separated parts, and also that the length of the cradle when extended may be limited by varying the length of the sliding bars or the extent of their sliding movement.

Having described the nature of my invention, and the manner in which the same is to be performed, I would have it understood that what I claim as my invention, to be protected by the hereinbefore in part recited letters patent, is the construction of cradles for heaving up ships in parts whereby they may be extended or contracted, for the purposes and as hereinbefore described.

In witness whereof I, Robert Turnbull, have hereunto set my hand and seal this seventh day of July, in the year of our Lord one thousand eight hundred and fifty-seven.

ROBERT TURNBULL. [L. S.]

Witness:
W. CLARK,
Patent Agent, 53 *Chancery Lane, London.*

It would have been unsafe to let one of the Turnbull sections run beyond the end of the railway into the mud or sand, while Talbert's device might have been applied to a solide cradle which with safety could have been run for a part of its length beyond the rails. It is the custom on some marine railways to run a portion of the cradle beyond the rails.

Talbert's device involved no weakening of the cradle. To get the same depth of water on the head of the cradle as is got by Talbert's device at the navy-yard, Turnbull, by cutting it into enough sections, would have weakened the cradle.

Turnbull could not conveniently block up a vessel in case of unequal distribution of weight without blocking from the ground and so preventing any movement of the cradle upon the track; this difficulty would increase with the number of sections, and in some instances it would be necessary to block from the ground; while by the Talbert device a vessel could be blocked up between the carriages, the timbers resting upon the top of the cradle bed and not interrupting the advance of the cradle itself upon the rails.

If the cradle be cut into sections, as in Turnbull's device, the wheels or rollers upon which the cradle runs are so separated that undue and unequal friction may result, while Talbert's device does not interfere with the cradle wheels, which may remain as near together as convenient or advisable. For these reasons Talbert's device can more safely take up heavier vessels and vessels drawing more water than can be taken up by Turnbull's device.

Conclusion of law.

Upon the foregoing facts the court find as conclusion of law, for the reasons set forth in the opinion of the court, that plaintiff recover the sum of $6,544.30.

28 VII.—*Opinion of the court.*

DAVIS, J., delivered the opinion of the court:

From 1833 until some time in 1860 plaintiff, who is by trade a ship carpenter, was employed in the Washington navy-yard. In 1860 he was without employment, and contemplating the establishment of a private shipyard upon the Eastern Branch of the Potomac, he was confronted with certain practical difficulties, which he undertook to surmount. The physical conditions exisiting upon the Eastern Branch, particularly in relation to depth of water, were such that a marine railway, having upon it a ship's cradle of the design in common use, could take out of the water only vessels of limited draught and length. To overcome this obstacle plaintiff devised an improvement to the cradle so that larger vessels could be taken successfully from the water and repaired at his projected shipyard. Before he had taken a patent for this invention the war broke out, and the increase of work at the navy-yard recalled plaintiff to his former employment. The ship's cradle at the navy-yard, also situated upon the Eastern Branch of the Potomac, was of the usual type, and was insufficient for the then needs of the service, as only boats of light draught and of little length could be taken out. The officers of the Navy, in an endeavor to remedy this defect, applied a device which was destroyed during the first trial, and they then requested Talbert, the plaintiff herein, to place his device upon the cradle, promising him compensation therefor. At that time Talbert had not received a patent for his invention, but later it was issued to him. The device was applied to the cradle at Government expense, and has since operated successfully.

The findings show that the device required inventive genius; that it was both novel and useful; and plaintiff demands in this action remuneration from the Government for the use of his invention.

He appears here by virtue of the following act of Congress:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that the claim of William Talbert, of Montgomery County, Maryland, for the use, by the Government, of his patented improvement for marine railways be, and the same is hereby, referred to the Court of Claims, with the authority to take jurisdiction thereof, and to award judgment thereon, as the merits of the case may demand, according to its value to the Government during the existence of such patent.

"Approved June 30, 1886."

It is urged in behalf of plaintiff that this act assumes the validity of the patent. It is not, however, necessary for us to analyze the argument advanced to support this interpretation, as we find that the patent was valid, inasmuch as the improvement was novel and useful, and was the product of original thought and inventive skill. The invention was adopted by the Government with plaintiff's consent and with full knowledge of his

claims, and the device has been used successfully by the Government during many years. The case, therefore, falls within the principles heretofore announced by the Supreme Court and by this court in several cases.

In Palmer's Case (128 U. S. R., 269) the Supreme Court said:

"The assumption of the appellant is erroneous. No tort was committed or claimed to have been committed. The Government used the claimant's improvements with his consent, and certainly with the expection on his part of receiving a reasonable compensation for the license. This is not a claim for an infringement, but a claim of compensation for an authorized use—two things totally distinct in the law, as distinct as trespass on land is from use and occupation under a lease."

This court, after reviewing the decisions affecting this subject, said (Schillinger's Case, 24 C. Cls. R., 298):

"A careful examination of these cases shows that a contract to pay is implied whenever the Government, acting through a competent agent, takes or uses individual property, acknowledging explicitly or tacitly that the property is individual property."

29 We conclude that plaintiff may maintain this action upon the theory of an implied contract, arising from use of his device with his consent, the use being a public one and the invention having been recognized as private individual property. It is therefore unnecessary to consider the argument that the special jurisdiction act is a legislative recognition of the validity in law of plaintiff's claim.

Among other defenses it is contended that there should be no recovery because plaintiff was a paid employé of the Government, and as a carpenter was directed to build upon the cradle at Government expense the cars and attachments constituting his invention. This, it is urged "is a case of license to use the invention if it be an invention." It may first be noted that the claim here is not for preparing the cradle, or for placing the device upon it, for which plaintiff was paid by wages as a shipwright, but is for the use of a patented invention with knowledge of plaintiff's claims, without adverse contention as to his alleged rights and with his consent. Further it appears that the invention was made by plaintiff at a time when he was not in Government employ and without intention at that time that it should be used at the navy-yard, and that it was made for the purpose of facilitating the taking up of vessels at the plaintiff's projected private ship-yard.

The case therefore presents none of the elements found in Solomon's Case (22 C. Cls. R., p. 342).

Talbert was not assigned to the task of devising, preparing, or making the device in question. The Government bore no expense of experiment incident to the invention, and when the device went upon the cradle it was complete, not experimental; nor when he made the invention was plaintiff an officer or employé of the Government, nor was he assigned to select a device to accomplish a desired result; that duty fell upon commissioned officers of the Navy; nor was this a transaction growing out of plaintiff's official service or position. (See also Davis vs. United States, 23 C. Cls. R., 329.)

Section 4899 of the Revised Statutes, so far as applicable to this case, provides in substance that every person who before application for a patent, with the inventor's knowledge and consent, constructs a machine afterwards

patented, may use that machine without liability for royalty. It is urged for defendants that this statute bars any recovery by the plaintiff.

It is true that plaintiff consented to the application of his device to the cradle at the navy-yard; but that consent was coupled with a condition, to wit, that he should be paid for its use. Admiral Smith had not the power to commit the Government to a contract for royalty, but an implied contract arose, as we have seen from the user, and having taken advantage of the act of their agent, Admiral Smith, the Chief of the Bureau of Yards and Docks, in applying the device, they must be held to the condition, agreed upon by him and Talbert, that the patentee should be compensated. Plaintiff did not consent to the gratuitous use of his invention, quite the contrary, he consented to its use upon promise of compensation, and so the claim does not fall within the provisions of section 4899.

A patent, granted in England to one Turnbull has been introduced by the defense as defeating plaintiff's claim of novelty of invention. The Turnbull device is a cradle cut into sections connected by rods; these sections are bunched at the foot of the railway, the vessel's forefoot grounds upon the upper section, which is then pulled up the railway the length of the connecting rod, where the second section starts, taking up its share of the vessel's weight, and so on with the other sections until the whole cradle is in motion with the vessel upon it. Turnbull, by cutting the cradle, lessens its strength, while Talbert's device is applied to a solid cradle. Turnbull's cradle can not be run beyond the rails, while a solid cradle, with Talbert's device upon it, can be so run; and Turnbull, without the use of so many sections as to seriously weaken the cradle, can not get the same depth of water at the head of the cradle as is given by Talbert's device. As Turnbull can not successfully block up the vessel without blocking from the ground between the sections, which would stop the cradle's forward movement, he can not conveniently readjust an irregular distribution of weight; Talbert, on the other hand can block the vessel up by timbers resting on the top of the cradle's bed without interfering with the motion of the cradle up the railway. Retaining the solid cradle, Talbert can conveniently adjust the cradle's wheels so as to equally distribute the weight, while Turnbull is limited in this distribution by the spaces between the sections and incurs the danger of undue friction upon certain wheels, which, because of the difficulty of blocking already mentioned, it would be difficult, if not impossible to correct. Talbert's device is, in our opinion, a material improvement over Turnbull's; it accomplishes the same end, but accomplishes it in a different and better manner.

There remains to be considered only the question of the amount of compensation which should be awarded plaintiff. He claims a large sum, basing this demand apparently upon value to the Government of an unusual nature, due, perhaps, largely to the pressure of military necessity. It is urged, also, that the special act established a measure of damage peculiar to this case when it said that this court should award judgment "as the merits of the case may demand, according to its value to the Government during the existence of such patent." It is said that if this act be litterally construed and the judgment be proportioned to the value of the use of the invention to the Government, it would be for a very large sum.

We do not understand that Congress intended in this act to establish a new rule for estimating the remuneration plaintiff should receive, for while the words "according to its value to the Government," taken alone, might tend to the belief that some exceptional advantage to the Government was to receive exceptional compensation, these words are limited by the preceding clause, that we are to award judgment "as the merits of the case may demand," which means that we are to proceed, as in other cases, to give to the plaintiff what he would recover in a similar action against an individual.

Discussing the word "value" the Supreme Court have said (Suffolk Company v. Hayden, 3 Wal., 315):

"But looking at the term value, in the connection in which it was used, it is quite clear that it had reference only to the utility and advantages or value of the use of the improvement over the old mode of cleaning cotton; not the value of the patent itself."

This case was followed by the Court of Claims in Dahlgren's Case (16 C. Clms., 30.)

31 We assume that Congress, in enacting this special statute, had in view the rule of interpretation thus stated by the Supreme Court "With the knowledge of our construction, like words being again repeated by Congress, it may be considered that a like construction was intended, and was expected to be given to those words. (Mason v. Fearson, 9 How., 248–258.)"

In speaking of the "value to the Government" of plaintiff's invention, Congress, we understand, intended to prescribe, as the measure of damage in this case, the rule heretofore prescribed by the Supreme Court and followed by the Court of Claims.

Much difficulty has been encountered in estimating the amount of plaintiff's recovery, for while the invention is useful, it has not been used elsewhere than at the navy-yard, so that we are ignorant what royalty would be paid by a private shipyard. This is a difficulty constantly recurring in actions against the Government, founded upon the use of patented inventions, as these inventions are usually of devices, such for example, as fire-arms, ammunition, or military equipments, not used by individuals.

In Dahlgren's Case we said:

"The materials for estimating the damages, or in the language of the statute, the amount of compensation which Admiral Dahlgren's estate is justly entitled to receive from the United States, are meager. The patented articles have no market value, inasmuch as the United States is the only consumer. Therefore the inventor has lost no profits in the ordinary sense of the term. The inventor has made no license to any one, and had therefore no fixed royalty. The claimant, it is true, attempted to establish the reasonable worth of such a royalty on the basis of the weight of metal in the pieces; but the effort failed. The United States have not dealt in the articles, and have not used them so as to gain a profit in the ordinary commercial sense of the term. We are therefore thrown back upon the rule laid down in Sulfolk County v. Hayden (3 Wall., 320), and must find the measure of the claimant's compensation in the utility and advantage of the invention to the United States over the old modes or devices that had been used for working out similar results.)"

Estimating upon this theory the value to the Government of plaintiff's invention "during the existence" of the patent, we find it to have been $6,544.30, and award judgment in his favor for this sum.

32 VIII.—*Judgment of the Court.*

WILLIAM TALBERT, }
vs. } 15220.
THE UNITED STATES. }

At a Court of Claims held in the city of Washington on the third day of February, A. D. 1890, judgment was ordered to be entered as follows:

The court on due consideration of the premises find for the claimant, and do order, adjudge, and decree that the said William Talbert do have and recover of and from the United States the sum of six thousand five hundred and forty-four dollars and thirty cents ($6,544.$\frac{30}{100}$).

BY THE COURT.

33 IX.—*Application of Claimant for and Allowance of Appeal.*

WILLIAM TALBERT, }
vs. } 15220.
THE UNITED STATES. }

From the judgment rendered in the above-entitled cause on the third day of February, 1890, in favor of the claimant, the claimant on the 28th of April, 1890, makes application for and gives notice of an appeal to the Supreme Court of the United States.

S. S. HENKLE,
Attorney of Record.

Filed and allowed in open court, April 28, 1890.

WILLIAM A. RICHARDSON,
Chief Justice.

34 X.—*Application of defendants for and allowance of appeal.*

WILLIAM TALBERT }
vs. } 15220.
THE UNITED STATES. }

From the judgment rendered in the above-entitled cause on the third day of February, 1890, in favor of the claimant, the defendants by their attorney-general, on the 29th day of April, 1890, make application for and give notice of an appeal to the Supreme Court of the United States.

JOHN B. COTTON,
Asst. Atty. General.

Filed and allowed in open court April 29, 1890.

WILLIAM A. RICHARDSON,
Chief Justice.

35 In the Court of Claims.

WILLIAM TALBERT
vs.
THE UNITED STATES. } 15220.

I, John Randolph, assistant clerk of the Court of Claims, do hereby certify that the foregoing are true transcripts of the pleadings in the above-entitled cause, of the findings of fact by the court, and the conclusion of law therein, of the opinion of the court, of the judgment of the court, of the application of claimant for and allowance of appeal to the Supreme Court of the United States, and of the application of the defendants for and allowance of appeal to said Supreme Court.

In testimony whereof I have hereunto set my hand and affixed the seal of said Court of Claims, at Washington City, this 14 day of June, A. D. 1890.

[SEAL.]

JOHN RANDOLPH,
Asst. Clerk Court of Claims.

Due for making up record, thirteen dollars; received the same of S. S. Henkle June 14, 1890.

JOHN RANDOLPH,
A. C. C. C.

(Indorsement on cover:) No. 389. William Talbert, appellant, *vs.* The United States. 14097. No. 390. The United States, appellant, *vs.* William Talbert. 14098. Court of Claims. Filed August 6, 1890.